ADVANTAGE PLUS™

TREATED PRIMED PINE

ARAUCO.

TruCHOICE™ Treated

Technical Manual

Distributed by:

Kelleher CORPORATION

ARAUCO.
Growing the Future

TruChoice ARAUCO's **Sustainable Practices**

- 100% of wood from certified, sustainably managed plantation forests.
- No use of native forests.
- Certified to strict CERTFOR forest management standards that are endorsed by international non-profit group PEFC.
- Respect for the rights of indigenous peoples.
- No genetically modified trees.
- Verified legal origin.
- USDA Lacey Act Compliant.
- California CARB Compliant (MDF).
- Mills powered by carbon neutral, biomass-generated green power.

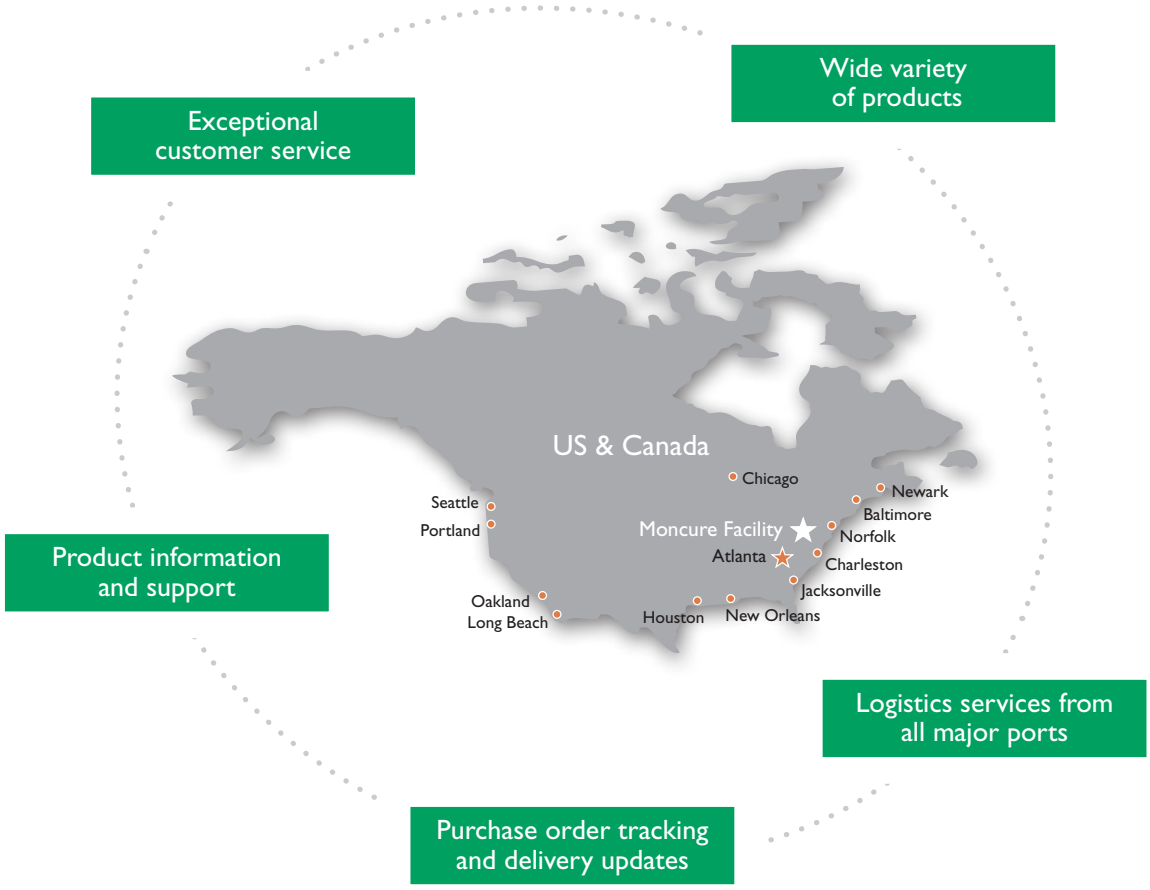
Technical Manual

November 2012

ARAUCO
Growing the Future

ARAUCO
in North America

ARAUCO USA is responsible for North American sales and service support for ARAUCO, a global leader in the manufacture of sustainable forest products.



ARAUCO USA is your convenient, single point of contact for AraucoPly panels, TruChoice Arauco millwork, Trupan MDF and HDF, particleboard, melamine panels, lumber, and pulp products.

A long-term supplier of sustainable, high-quality forest products for the North American market, ARAUCO USA is committed to earning your business by streamlining the purchasing process and providing superior customer service before and after the sale. Our sales, operations and production teams offer exceptional service and support, including detailed product information, product application and finishing guides, purchase order tracking, and delivery updates. Our products are forwarded to more than 3,000 locations across the U.S. and Canada.

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ARAUCO Around the World

For more than 40 years, ARAUCO has been driven forward by its vision of being a global leader in sustainable forest products. During this time, we have evolved into one of the most respected forestry companies in the world, not only for the size and health of our plantation forests, the quality of our products, and superior customer service, but for our technical innovation, environmental responsibility and social commitment as well.

Our natural resources are the cornerstone of our sustainability. Through Bioforest, ARAUCO's scientific and technological research center, we apply leading-edge biotechnology to the development of new ways to increase the quality, productivity, and performance of our forest plantations, as well as conservation and protection strategies to more than 800,000 acres of native forest within our forest holdings.

The products and services provided by ARAUCO's forestry, wood pulp, sawn timber, panels, and energy business areas embody the company's commitment to sustainable resources management. ARAUCO employs certified production processes that have minimal environmental impact to deliver a broad range of high quality products, meeting the needs of customers in 71 countries.

By carefully analyzing market trends, ARAUCO is able to anticipate market needs and have the right mix of product available for its customers.

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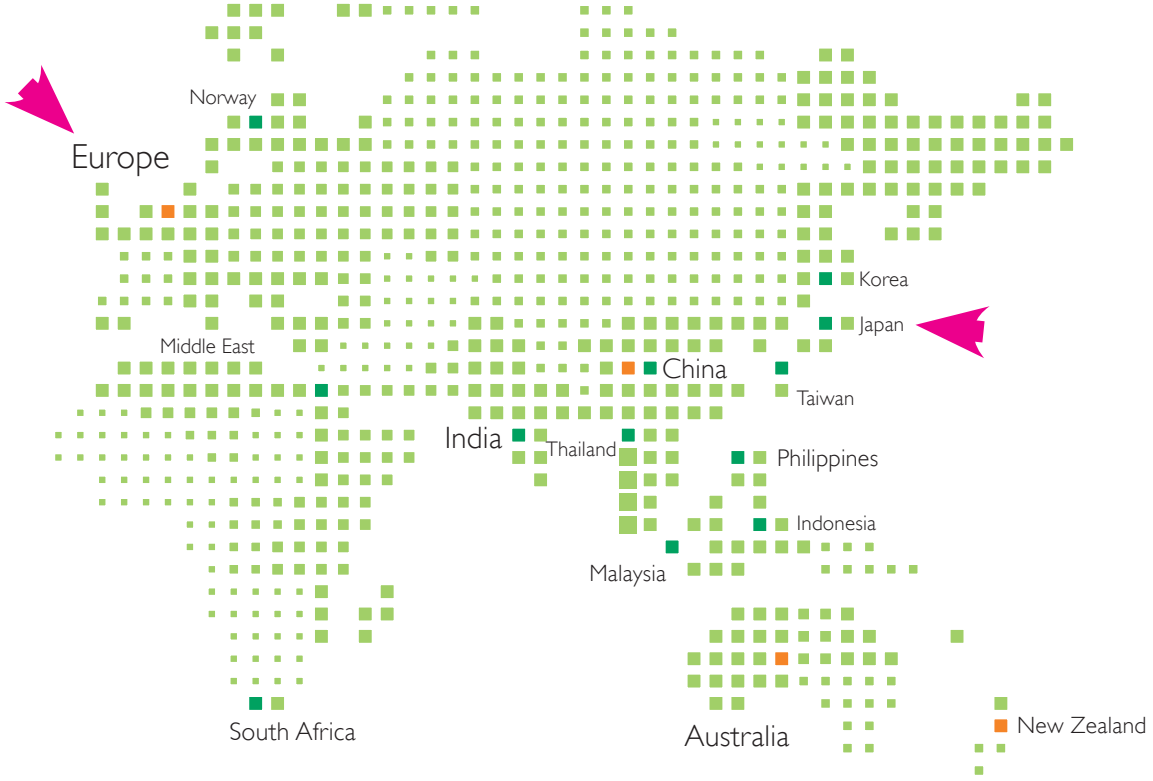

- Sales Offices
- Operational Centers
- Sales Agents

Chile
1.1 million hectares (2.7 million acres)
5 Pulp mills
8 Saw mills
3 Panel mills
5 Remanufacturing facilities
9 Energy Plants

Argentina
257,720 hectares (636,500 acres)
1 Pulp mill
1 Saw mills
2 Panel mills
1 Remanufacturing facility
2 Energy Plants

Brazil
173,079 hectares (427,500 acres)
2 Panel mills

Uruguay
32,663 hectares (327,700 acres)

USA
8 Panel mills

Annual Capacity

Wood Pulp
3.2 million ADt

Sawn Timber
1,145 MMBF

Panels
2,163 MMBF

Energy
643 MW

Through its sales offices in Argentina, Brazil, Chile, Chine, Colombia, Holland, Mexico, Peru and the United States, and sales agents in many other countries, ARAUCO delivers a superior level of customer service. This sales network, together with the company's state-of-the-art global logistics system covering transportation, loading/unloading, storage and distribution, has earned ARAUCO a reputation for consistent availability and timely delivery the world over.

ARAUCO's success is based on satisfying our customers with quality products and services while balancing the company's needs with those of our employees, the environment, and the people who live near our facilities and plantations. This is the starting point for the responsible and efficient management of our natural resources, the occupational health and safety of our workers, and our active contribution to social development and welfare in the communities in which we operate.

Technical
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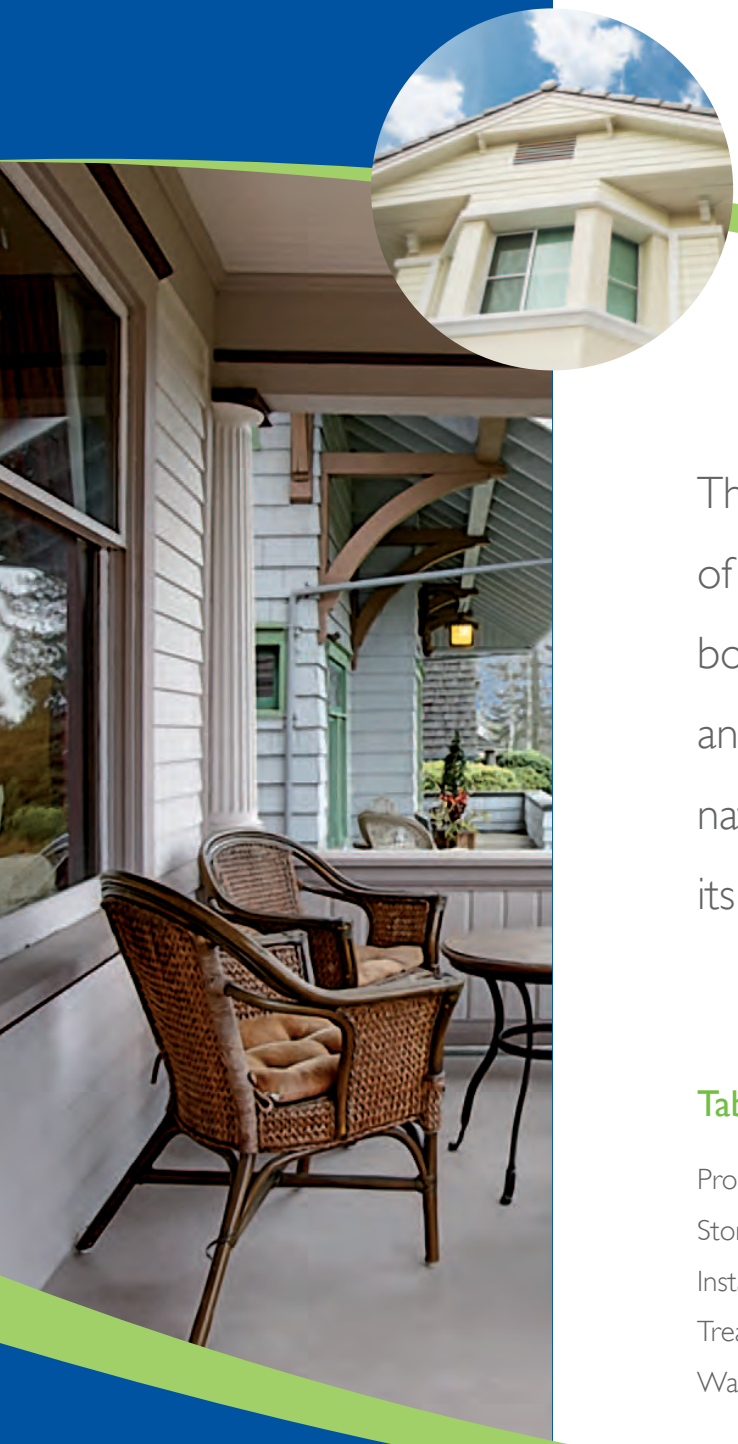
ARAUCO
TruCHOICE™
Treated



The new TruChoice Treated line of exterior siding and edge-glued boards delivers quality, durability, and resistance against whatever nature can throw its way. Best of all, its real wood as nature intended.

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Info@truchoicemoulding.com
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TruChoice Treated

Manufactured from finger-jointed and edge-glued Radiata Pine from ARAUCO's sustainably managed, certified forest plantations in Chile, TruChoice ARAUCO Exterior Siding & Edge-Glued Board products are treated for moisture-, decay- and pest-resistance, and carry a 30-year limited warranty against fungal decay and insect attack.

Benefits

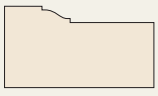
- Cost effective
- Durable
- Easy to install
- Ready to paint
- Beauty and detail of real wood

Product Features

- Made from high-quality Radiata pine grown in Arauco's sustainably managed plantation forests 30-year limited warranty
- Resistance against moisture, termites and fungal decay
- Non-corrosive to nails and fasteners
- Resistant to warping and shrinkage
- Smooth, sanded surface that is free of defects
- Surfaced with a ready-to-paint, Alkyd (oil) primer
- Available smooth-sanded or rough sawn
- Treated to AWPA classification code of category UC3A

Applications

- Interior or exterior applications that are not in direct contact with the ground
- Fascia Boards
- Siding
- Corner Boards
- Mouldings, door and window components

TruChoice Treated Standard Profiles			
Boards	Edge Glued Boards		Available in 21/32", 23/32" and 5/4" in Widths 2" - 12"
Siding	Beaded Siding		11/16" x 5 1/2"
	Bevel Siding		11/16" x 7 1/4"
	Channel Siding		3/4" x 7 1/2"
	Dutch Lap Siding		11/16" x 7 1/4"
	Shiplap Siding		3/4" x 5 1/2"
Moulding	Brick Mould		1 1/4" x 2"

Note: Additional sizes and profiles are availables. Contact your ARAUCO Sales Representative for more information.

Storage and Handling

One of the greatest features of the TruChoice Treated line of sidings, edge-glued boards, and mouldings is that they are all made from 100% real wood. Because TruChoice Treated products are real wood, it is important to understand the way wood reacts to its environment and to take the proper steps noted in this manual when storing and handling the product.

Moisture and Wood

One of the most important steps in assuring top quality and performance from TruChoice Treated products is to keep them clean and dry prior to installation. Wood naturally shrinks as it dries and swells when it is exposed to moisture. This swelling and shrinking can cause splitting, checking, buckling and nail popping that will affect performance before and after installation. Most performance problems related to moisture can be avoided by proper storage, handling and installation.

Warehouse Storage

It is important for TruChoice Treated sidings, edge-glued boards, and mouldings to be stored off the ground, well supported and securely covered, in a covered building and out of the weather. While stored in a covered building, the packaging in which TruChoice Treated is shipped will act as a proper cover. In the event that the original packaging is opened or damaged, it is important to re-cover the opened or damaged unit with a breathable, weather resistant material that is secure but loose enough to permit air circulation in order to avoid condensation
in the stack. Do not allow TruChoice Treated boards to become directly exposed to rain, water, ice, snow or the sun for prolonged periods of time.

Job-Site Storage

It is important for TruChoice Treated sidings, edge-glued boards, and mouldings to be stored off the ground, well supported and securely covered with a breathable, weather resistant material that is secure but loose enough to permit air circulation in order to avoid condensation in the stack. Be sure that no water can become entrapped on top or underneath the covered product. When available on the job-site, it is best to store TruChoice Treated products in a well-ventilated shelter. For best results, let TruChoice Treated products reach equilibrium with the local climate by storing them at least 15 days in a well –ventilated shelter prior to installation. Do not allow TruChoice Treated boards to become directly exposed to rain, water, ice, snow or the sun for prolonged periods of time prior to installation and finishing.

FALTA DIBUJO DE EMBALAJE
(Pallet) de Molduras

Additional Handling Information

Do not use TruChoice Treated in any area where it may come in contact with human or animal food. Examples of such structures include but are not limited to counters or places where food may be prepared or cut, and structures for human or animal food storage. All sawdust and remnants of TruChoice Treated products should disposed of after project completion.

Disposing of TruChoice Treated sawdust and remnants is as easy as throwing the collected material into a dumpster or household exterior trashcan. Never burn TruChoice Treated sawdust or remnants in household fireplaces, wood stoves, or boilers.

Installation Instructions

Before Starting

Before starting to work with TruChoice Treated sidings, edge-glued boards and mouldings, be prepared to adhere to the following guidelines:

- Do not install wet TruChoice Treated products.
- Do not install Truchoice Treated products that have moisture content over 14%.
- Follow the highest quality building practices when installing.
- Follow all applicable federal, state, and local building codes.
- TruChoice Treated products are not to be used in load-carrying applications.

Cutting

TruChoice Treated sidings, edge glued boards and mouldings may be cut to length and/or notched as required for fitting and joining. It is important that TruChoice Treated products are not re-sawn or re-sized in any other way. Failure to follow this guideline could void the warranty. Be sure to wear safety glasses and a dust mask while making all cuts. Brush all sawdust off skin and clothes after making cuts. Keep the work area clean and do not allow wood dust to accumulate.

End-Sealing

All subsequent cuts, notches or bore holes must be coated with a high-quality brush-on or spray-on wood preservative containing zinc naphthenate. Follow all of the recommended application instructions printed on the wood preservative can.

Failure to use a wood preservative on cuts, notches, and bore holes will void the warranty. In addition, all sealed end cuts should be coated with a high-quality oil based or acrylic exterior wood primer prior to installation.

Nailing and Fastening

Prolonging the life and beauty of TruChoice Treated relies on adhering to the highest building standards. These standards include but are not limited to:

- Proper roof overhangs
- Flashing at roof edges
- Flashing around openings such as windows, doors, and garages
- Proper vapor barriers
- Proper installation of gutters and downspouts
- Proper attic insulation, ventilation, and exhaust fans

Installation Instructions

When choosing nails to fasten TruChoice Treated, select ring-shanked wood siding nails that are non-corrosive. This will help to avoid nail stains. Stainless steel or high-quality, hot-dipped galvanized nails can also be used for installation. The nails should be properly sized so that the shank penetrates 1-1/2" into the framing members or a combination of framing members and solid wood sheathing. If the sheathing is not solid wood, longer nails are needed.

Do not use common iron, copper, cement-coated, electroplated or poor quality galvanized nails. These types of nails will cause stains. Do not use casing, finishing or other small-head nails, except for blind nailing Tongue & Groove. Staples should not be used as a fastener, as they do not have enough holding strength.

TruChoice Treated should be installed over a wood-based sheathing that is covered with a water-resistant building paper that has a rating of at least 5 perms. Do not nail TruChoice Treated to the sheathing only. This will not hold. Do not install Truchoice Treated directly on top of foam sheathing. This could cause moisture to become entrapped. It is recommended that TruChoice Treated be installed using a miter or bevel cut at the half joints. This can minimize gaps related to shrinkage. If TruChoice Treated is installed using butt joints, it is recommended that the joints be flashed. All end cuts should be end-sealed prior to installation as recommended in this manual. In addition, it is recommended that all sealed ends be coated with a high-quality oil-based or acrylic exterior wood primer prior to installation.

Hand nailing is the preferred method for installing TruChoice Treated. This will allow for minimum disturbance of the original prime coat. A nail gun can be used, but it is important that the air pressure be adjusted to allow the nails to sit flush when installed. Nails can be countersunk by 1/16", but they must be covered with an end-sealer. To create a flush finish, exterior grade putty that is compatible with alkyd/oil based paints should be used to fill the holes. Additionally, it is recommended to pre-drill before nailing mitered corners or near ends. This will prevent splitting near the ends. Be sure to apply an end-sealer to the pre-drilled holes after nailing as recommended in this manual.

Note that TruChoice Treated must be nailed to allow for the natural wood movement during temperature changes. Do not nail through overlapping pieces as this will restrict the natural movement.

Recommended Nailing Methods

Vertical Siding (Overhead View)

V Shiplap

Face nail with two siding nails per bearing for patterns wider than 6". Position nails one-quarter of the width of the material from each edge. For narrow courses, one nail per bearing is enough. The nailing point should be 1" from the overlapping edge.

Tongue and Groove

Blind nail 4" and 6" widths through the tongue with finish nails. Use one nail per bearing. For wider patterns, face nail the siding with two nails per bearing, as in the V Shiplap method.

Horizontal Siding (Side View)

Plain Bevel

Face nail the siding with only one nail per bearing. Drive the nail so that the shank clears the top of the preceding under course by 1/8".

Be careful not to drive the nail home with an initial blow that is too heavy. This can cause wood to split or cup due to the lack of support in the cavity.

Rabbeted Bevel

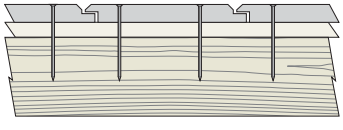
Face nail with only one nail per bearing. Place the nail about 1" above the lower edge of the course. Position the material to allow a 1/8" expansion gap at the rabbet joint.

Channel Shiplap

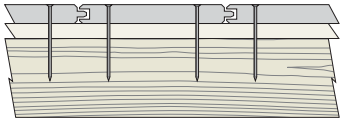
Use one nail, 1" from the lap, for 6" channel shiplap. Face nail the siding with two nails per bearing for patterns 8" and wider. Space nails 1-1/2" from the edge of the overlap and 2" from the edge of the underlap. Position the material to allow an expansion clearance of 1/8". The boards should be nailed to the horizontal blocking installed between the studs at no more than 24" on center.

Tongue and Groove

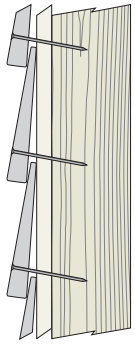
Blind nail the 4" and 6" widths through the tongue using finish nails. Use one nail per bearing. For wider patterns, face nail the siding with two nails per bearing, as in the V Shiplap method.



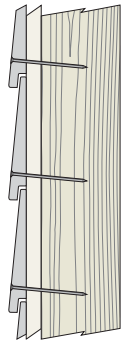
V Shiplap



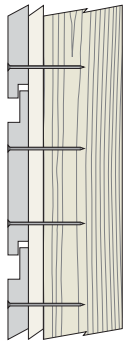
Tongue and Groove



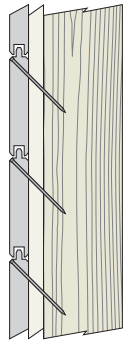
Plain Bevel



Rabbeted Bevel



Channel Shiplap



Tongue and Groove

Installation Instructions

After installing TruChoice Treated, it is important to spot prime all nail locations, scuffed areas and other areas that are showing bare wood with a high-quality, oil-based, stain-blocking primer. If the nails were countersunk or a nail hole was drilled, be sure to seal the hole with the proper wood preservative as recommended in this manual. If an area of the wood was damaged beyond a scuff, it is important to use the proper wood preservative and putty for repair as recommended in this manual prior to spot priming.

Glue, Putty, and Sealant

While not common, if gluing TruChoice Treated sidings, edge gluded boards, and mouldings is necessary to complete the installation, use non-casein containing wood glue. TruChoice Treated products may not be used in load-bearing or structural applications.

Putties may be used to fill holes made during installation (e.g. countersunk nails). Make sure that the putty is compatible with alkyd/oil based paints. Sealants used around joints must be compatible with alkyd/oil based paints. In colder climates (below 40°F), use a cold weather caulk sealant. Sealants alone are not to be used for weather protection.

Painting

TruChoice Treated sidings, edge-glued boards, and mouldings must be painted within 30 days of installation. TruChoice Treated products require at least two coats of high-quality alkyd/oil based exterior enamel, or 100% acrylic exterior stain or gloss as a top coat. Do not use low quality flat oil or alkyd paints, vinyl actetate (PVA), vinyl acrylic or vinyl acrylic co-polymer paints.

For best results, follow these steps when applying a top coat to TruChoice Treated products:

- During the period between installation and painting, the product must be kept dry and out of contact with rain, dew, ice or snow.
- TruChoice Treated products must be dry before painting, with a moisture content at or below 14%.
- Prior to painting, clear all loose material, dust, grease, etc. off the surface. Sand lightly to obtain a smooth, level surface.
- Apply all top coats in conditions that are dry and above 50° F.
- Allow for 24 hours of drying time between finish coats.
- Follow all of the other instructions on the paint manufacturer's label and follow best practices when applying the top coat.
- When possible, it is recommended to apply the first coat of paint prior to installation.

When choosing a color, consider the Light Reflectance Value (LRV). Paints that are lighter in color have a higher LRV and remain cooler. Darker paints tend to reflect less light and absorb more heat. Heat dries out wood and can cause shrinkage and warping. Lighter colors with a LRV of 45 or more are recommended when top coating TruChoice Treated products.

Resin Bleed

TruChoice Treated sidings, edge-glued boards, and mouldings are produced from 100% real Radiata Pine wood. While it is not typical, there could be some resin bleed. When this happens, it usually due to hot conditions during storage or because of paint colors that have a low LRV. Resin bleed can be minimized if the painting steps within this manual are followed closely. If resin bleed is experienced, contact your distributor or TruChoice Treated directly for solutions.

Maintainence

It is important to follow all of the paint manufacturer's instructions on how and when to re-apply the top coat. If at any time, TruChoice Treated sidings, edge-glued boards, or mouldings are scuffed or lightly damaged due to causes other than decay or termites, follow the instructions in this manual for applying wood preservative, puttying, spot priming, and applying the top coat. Failure to maintain TruChoice Treated products in accordance to the guidelines in this manual will void the warranty.

Additional Installation Information

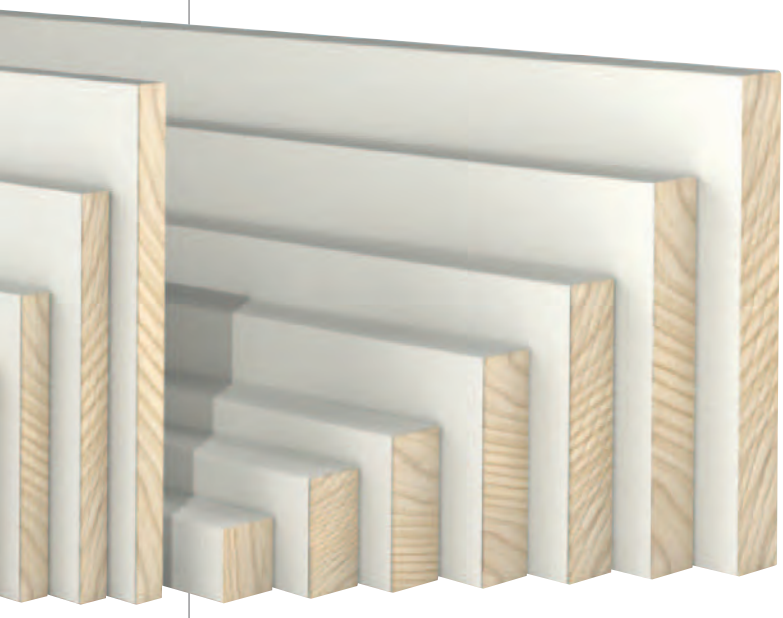
If questions arise during any point of handling, storing, preparing, installing, or finishing TruChoice Treated products, contact a distributor or TruChoice Treated directly.

www.truchoicemoulding.com

Treatment and Priming

Substrate

- 100% Radiata Pine (finger-jointed and edge-glued) sourced from Arauco's own sustainable, renewable plantation-grown forests
- ARAUCO's forests are certified to the CERTFOR sustainable forest management standard (a rigorous, third-party standard endorsed by independent, international standards-endorsement organization, PEFC)
- A cross-linking PVA adhesive recommended for applications requiring ASTM D5572 wet use performance is applied to the finger-joints.
- An EPI adhesive that conforms to ASTM D5751 and meets the requirements for wet use is the bonding agent for the edge-glue.
- All TruChoice Treated sidings, edge-glued boards, and mouldings are precision-milled for consistent quality and superior performance.



Treatment

TruChoice Treated sidings, edge-glued boards, and mouldings are LOSP (Light Organic Solvent Preservative) treated with Vacsol® Azure by Arch Chemicals, whose three EPA approved active ingredients are commonly used in agriculture (Propiconazole and Tebuconazole as fungicide components and Permethrin as the insecticide and/or termiticide component. The process includes water repellent components (paraffin wax and hydrocarbon resin).

Other features include:

- Formulated to meet the requirements of the American Wood Preservers Association (AWPA) in the categories of UC2, UC3A, and UC3B (above ground, exterior uses)
- Treatment does not modify wood's natural color.
- Products are treated after passing through the moulder, avoiding generation of treated waste.

Primer

TruChoice Treated sidings, edge-glued boards, and mouldings are primed with an Alkyd primer specially developed for ARAUCO by Sherwin William Chile S.A. This prime was specifically developed to work with the LOSP treated Radiata Pine TruChoice Treated products and offers:

- Alkyd primer formulated for use with LOSP treated wood
- High filler performance and good adhesion, leveling and hiding power
- Acrylic second coat available
- Strong base for top coat adhesion
- High resistance to cracking, flaking, and/or chipping
- Acrylic second coat a available

Warranty

TruChoice Treated 30-Year Limited Warranty

As the manufacturer of TruChoice Treated sidings, edge-glued boards and mouldings, ARAUCO offers a 30-year limited warranty against termites and fungal decay. This limited warranty guarantees the replacement of any TruChoice Treated product, which conforms to the stated conditions within this document and the full warranty document, which becomes unserviceable due to fungal decay or termite attack within the warranty period. Replacement product will be supplied at the original point of purchase or the closest alternative point, if the original supply point is not available.

In order to benefit from this limited warranty, complete the warranty form* and retain it in the unlikely event of a future claim. Retain copies of the proof of purchase such as invoices or receipts and end-tags from the installed TruChoice Treated product for confirmation against this warranty.

The TruChoice Treated limited warranty is subject to all rules and conditions set forth in this TruChoice Treated Technical Manual and the full warranty document. These include but are not limited to:

- Following proper building standards & codes.
- Following all TruChoice Treated recommended installation and maintenance instructions.
- Any deterioration or faults due to inherent physical properties of the wood such as shrinking, swelling, warping, twisting or resin bleed are not covered.

* The warranty form can be found and printed along with the full TruChoice Treated warranty on ARAUCO's website.

Primer 2-Year Limited Warranty

Arauco offers a 2-year limited warranty on the primer for TruChoice Treated sidings, edge-glued boards and mouldings. This limited warranty guarantees the cost of paint to repair installed TruChoice Treated product, which conforms to the stated conditions within this document and the primer supplier's user manual, which experiences cracking, flaking, and/or chipping due to primer failure.

In order to benefit from this limited warranty, complete the warranty form* and retain it in the unlikely event of a future claim. Retain copies of the proof of purchase such as invoices or receipts and end-tags from the installed TruChoice Treated product for confirmation against this warranty.

It is recommended to retain the information for the paint used to cover TruChoice Treated products. Follow all of the paint supplier's instructions for application and maintenance.

This Primer 2-Year Limited Warranty is subject to all rules and conditions set forth in this TruChoice Treated Techincal Manual and the full primer supplier's user manual.

To file a claim against the TruChoice Treated 30-Year Limited Warranty or the Primer 2-Year Limited Warranty, contact ARAUCO directly. Include photographs along with the completed warranty form*, original proof of purchase, TruChoice Treated end-tags, and description of the claim. ARAUCO reserves the right to have a representative review the product in question.

Please contact your local TruChoice Treated distributor for terms and conditions.
For all of the details on this TruChoice Treated 30-year Limited Warranty, please visit ***www.truchoicemoulding.com***

TruCHOICE Treated

For more information visit:
www.**truchoicemoulding**.com

Kelleher CORPORATION

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14494 NOVEMBER 12

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PEFC certified
This paper comes from sustainably managed forests and controlled sources.
www.pefc.org

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